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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/600,245 | 06/20/2003 | Sandeep Bhatia | 14532US01 | 5543 |
| 23446 7590 09/18/2008 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661 | | | EXAMINER | |
| | | | VO, TUNG T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2621 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 09/18/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
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| | 10/600,245 | BHATIA, SANDEEP | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Tung Vo | 2621 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| | / IS SET TO EVRIDE AS MONTH | I/C) OD THIDTY (20) DAVC | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timuser, will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>08/18</u> | 5/2008. | | | | |
| | action is non-final. | | | | |
| 3) Since this application is in condition for allowar | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| - 4)⊠ Claim(s) <u>1-11 and 16-20</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) <u>12-15</u> is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1-11 and 16-20</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | |
| 10)⊠ The drawing(s) filed on <u>20 June 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| | | | | | |
| Attachment(s) | . 🗖 | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) ∐ Interview Summary Paper No(s)/Mail Da | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) | 5) Notice of Informal P | | | | |
| Paper No(s)/Mail Date | 6) | | | | |

Art Unit: 2621

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/15/2008 has been entered.

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2. Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
- 3. Claim 21 recited "the FIFO stores the indicators in the particular order prior to the display engine". The specification does not particularly disclose "the FIFO stores the indicators in the particular order *prior* to the display engine". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2621

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-11, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kono et al. (US 2001/0005398) in view of Adolph et al. (US 6,438,318).

Re claims 1, 5, 8-11, and 16-20, Kono teaches a circuit (fig. 6) for displaying images on a display, said circuit comprising: a first processor (52 of fig. 6) is a decoder; a first memory (54 of fig. 6, Note the decode control section holds the initial decode starting instruction and slice layer decode starting instruction, which is considered as a memory) operably coupled to the first processor, said first memory storing a plurality of instructions for execution by the first processor, wherein the plurality of executable instructions cause: decoding (63 of fig. 6) encoded images and parameters associated with the images, thereby resulting in decoded images, and decoded parameters (PATH FOR WRITING/READING DECODED PICTURE AND PARAMATERS, 62 of fig. 6, Note writing is storing the decoded picture and parameters into the display control section, 55 of fig. 6; so the display control section (55 of fig. 6) would obviously has a memory for storing the decoded picture and parameters) associated with the decoded images (71 of fig. 6); storing the decoded images (53a-53b of fig. 6) and parameters associated with decoded picture in the parameter storing area (53e of fig. 6, see also 53f, 53g, and 53h of fig. 6); a second processor (55 of fig. 6) operably coupled to the status register (57 of fig. 6) for updating an image to be display on a display unit ([0075], [0084]-[0085]); a second memory (57 and 53f-53h of fig. 6) operably coupled to the second processor, said second memory storing a plurality of instructions (a display starting instruction, 68 of fig. 6) for execution by the second

Art Unit: 2621

processor (55 of fig. 6), wherein the plurality of executable instructions cause: presenting the images indicated by the display starting instruction for display (68, 74 of fig. 6; S16 of fig. 8); wherein the instructions causing presenting the images further comprise instructions causing receiving the decoded parameters and displaying the decoded images based on the decoded parameters (DISPLAY UNIT of fig. 6; [0075], [0085]).

It is noted that Kono does not particularly teach a FIFO for storing indicators indicating images to be displayed, and wherein the queue stores the indicators in a particular order, and wherein the display engine displays the picture associated with the indicators in an order corresponding to the order that the indicators are stored in the queue, wherein each indicator indicates a different image to be displayed as claimed.

However, Adolph teaches a FIFO (16 of fig. 7) for storing indicators (A, B, C, 16 of fig. 7) indicating images to be displayed, and wherein the queue stores the indicators in a particular order (I, P, B pictures, GOP as display order), and wherein the display engine (fig. 8) displays the picture associated with the indicators (A, B, C of fig. 7) in an order corresponding to the order that the indicators are stored in the queue (20 of fig. fig. 8), wherein each indicator (A of fig. 7) indicates a different image (I or P picture) to be displayed (col. 7, line 55-col. 8).

Therefore, taking the teachings of Kono and Adolph as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Adolph (16, 20 of fig. 7, and fig. 8) into the Kono for indicating the image (I, P, or B pictures) to be displayed in the display order so that the memory requirements of the decoder system to reduce its size and cost.

Re claims 2 and 6, Kono further teaches parameter buffers (53f-53h of fig. 6) for storing the decoded parameters associated with the images.

Art Unit: 2621

Re claims 3 and 7, Kono further teaches wherein the display engine (55 of fig. 6) presents the images indicated by the queue for display by receiving the decoded parameters and displaying the decoded images based on the decoded parameters (DISPLAY UNIT of fig. 6).

Re claim 4, Kono further teaches wherein the decoder comprises a first processor (54 of fig. 6) and the display engine comprises a second processor (DISPLAY UNIT of fig. 6).

Note the rejection of claim 21 as best understood as follows:

Re claim 21, Kono and Adolph further teaches wherein the FIFO stores the indicators in the particular order prior to the display engine displaying the images associated with the indicators in the order corresponding to the order that the indicators are stored in the FIFO (16 of fig. 7, storing decoded frames in an order before displaying based on the table 20, e.g. col. 5, line 55-col. 8, line 59).

Response to Arguments

4. Applicant's arguments filed 08/15/2008 have been fully considered but they are not persuasive.

The applicant argues Adolph does not teach the memory "stores the indicators" in the remarks.

The examiner respectfully disagrees with the applicant. It is submitted that Adolph teaches a memory (16 of fig. 7) for storing indicators (A, B, C, 16 of fig. 7) indicating images to be displayed, which is the same function as a FIFO for storing indicators indicating image to be display (130 of fig. 1 of the present invention; see [0032]), the memory (16 of fig. 7) stores the indicators based on the table (20 of fig. 7) in a particular order (A, B, and C order), and wherein the display engine (17 of fig. 7) displays the picture associated with the indicators in an order

Art Unit: 2621

corresponding to the order that the indicators are stored in the queue (fig. 8, note updating the corresponding entry for the decoded video frame in a table (20 of fig. 7) with the following information items: a reference to the frame memory in which the decoded video frame is stored, follow up information regarding the displaying status of the video frames in the frame memories). In view of the discussion above, the claimed features are unpatentable over Adolph and Kono.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Willis e al (US 6,154,603) discloses picture decoding for trick mode operation.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/

Primary Examiner, Art Unit 2621